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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,521	02/20/2004	Minoru Goda	7985/7	7165
7590 Brinks Hofer Gilson & Lione P.O. Box 10395 Chicago, IL 60610			EXAMINER TOLIN, MICHAEL A	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 06/05/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/783,521

**Applicant(s)**

GODA, MINORU

**Examiner**

MICHAEL A. TOLIN

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4, 6-8 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6-8 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claims 1, 2, 4, 6-8 and 13 are objected to because of the following informalities. Appropriate correction is required.

Regarding claim 1, "formed polyurethane" should be --foamed polyurethane-- to correct to minor grammatical error.

Regarding claim 13, "comprising" should be changed to --comprises-- to correct a minor grammatical error.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification discloses a pressure of 0.3 kg/cm<sup>2</sup> in Example 2. Claim 13, however, has broadened this point to a range of "about 0.3 kg/cm<sup>2</sup>". Since there is no

original disclosure of a temperature range, it does not appear Applicant possessed this limitation at the time of the invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, it is not clear that the bonding step of claim 4 is intended to further limit the bonding step of parent claim 1. The examiner suggests adding language to clarify that the bonding step of claim 4 is the previously recited bonding step.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4, 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly (US 735575) in view of Kleinermanns (US 3444017) and Jalowsky (US 4517910).

Pauly teaches a method of making a three-dimensional embroidery product comprising providing a base fabric layer and a top fabric layer (a, a'), providing an intermediary layer comprising a plurality of sheets (b), embroidering a pattern through the layers of fabric with thread, cutting the intermediary layer at a midpoint through its thickness to separate the top and base layers, and removing the intermediary layer (Figures 5 and 6; pages 1 and 2). As to forming embroidery patterns on the top and base layers in mirror images, such is clearly taught by Pauly (Figure 6; page 2, lines 8-13).

As to the claimed cutting limitation, there is no requirement in the claim that the cutting step involves cutting a single sheet between its top and bottom surfaces to split the single sheet into two pieces. The claimed cutting limitation has been interpreted as requiring no more than dividing an intermediary layer, which is clearly accomplished in Pauly by cutting between sheets (b) of the intermediary layer.

Pauly differs from the claims in that:

- i. Pauly does not teach an intermediary layer made of foamed polyurethane.
- ii. Pauly does not teach a step of bonding a thermal fusible film to at least one of the base and top layers under heat and pressure.
- i. Kleinermanns teaches a process which is very similar to that of Pauly. In one embodiment of Kleinermanns, a plurality of sheets are used as a temporary intermediary layer between top and base layers for a pile material such that a cutting step is used to provide pile of a desired height depending on the thickness of the spacing layers (Figures 6-11). While the figures show intermediary layers with

performed channels, Kleinermanns suggests that these channels are not necessary if the intermediary layer consists of a material which permits the passage and/or drawing of the pile threads (column 3, lines 10-31). Kleinermanns further teaches that polyurethane foam is desirable for the intermediary layer because it provides a retarding property which prevents backsliding of the thread material (column 2, lines 18-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to use foamed polyurethane sheets as the intermediary layer because one of ordinary skill in the art would have been motivated to use a known suitable spacing material in accordance with the teachings of Kleinermanns or because one of ordinary skill in the art would have been motivated to achieve the above noted advantages of a foamed polyurethane intermediary layer in accordance with the teachings of Kleinermanns.

ii. Jalowsky is applied as in numbered paragraph 8 of the previous office action for providing motivation to perform the claimed step of bonding a thermally fusible film. The previous office action was mailed on 07 November 2008.

The limitations of claims 4, 6 and 13 are satisfied for the reasons provided above.

Regarding the new pressure and time limitations of claim 13, Jalowsky indicates applying the film using heat and pressure (column 3, lines 52-58). One of ordinary skill in the art would have appreciated that a time sufficient for lamination is implicit in Jalowsky's teachings. Accordingly, determination of a suitable pressure and time to achieve lamination involves no more than expected and routine experimentation. Further, it is noted that pressures and times near the claimed values are generally well known to be suitable for bonding thermoplastic film to a substrate. It would have been

obvious to one having ordinary skill in the art at the time of the invention to laminate the film using the claimed temperature and pressure because one of ordinary skill in the art would have been motivated to use well known suitable temperatures and pressures to achieve such lamination or because one of ordinary skill in the art would have been motivated to determine suitable times and pressures as a matter of routine experimentation in view of the teachings of Jalowsky.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly in view of Kleinermanns and Jalowsky as applied to claims 1, 4, 6 and 13 above, and further in view of Tajima (US 6263817).

Tajima is applied as in numbered paragraph 7 of the previous office action.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly in view of Kleinermanns and Jalowsky as applied to claims 1, 4, 6 and 13 above, and further in view of Fortuna (US 6718895).

Fortuna is applied as in numbered paragraph 9 of the previous office action.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly in view of Kleinermanns and Jalowsky as applied to claims 1, 4, 6 and 13 above, and further in view of either one of JP 2000-64183 or Dreyfus (US 2211850).

JP 2000-64183 is applied as in numbered paragraph 10 of the previous office action. Dreyfus has been alternatively cited to provide additional motivation to use the

claimed thread composed of mixed wool and silk. It is clear from Dreyfus that thread materials including silk and wool may be mixed to provide a thread material which is strong, smooth and suitable for a wide variety of sewing applications and substrates (page 1, column 1, lines 1-20; page 1, column 2, lines 24-55). Accordingly, it is clear from Dreyfus that it would have been obvious to one of ordinary skill in the art at the time of the invention to use the claimed mixed thread because one of ordinary skill in the art would have been motivated to select a known suitable thread for sewing applications as a matter of routine design choice or because one of ordinary skill in the art would have been motivated to provide a known strong and smooth thread particularly suitable for sewing operations in accordance with the teachings of Dreyfus.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1, 2, 4, 6-8 and 13 have been considered but are moot in view of the new ground(s) of rejection.

With regard to Applicant's argument that claim 1 recites "cutting a single sheet into two pieces", this argument is not commensurate in scope with the claims. No such language is provided in the claims. The claimed intermediary layer is not restricted to a single sheet, as noted in the rejections above. The examiner must give the claims their broadest reasonable interpretation, which includes an intermediary layer comprising a plurality of sheets.



***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The new limitations added to independent claim 1 necessitated the new grounds of rejection applied above.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MICHAEL A. TOLIN** whose telephone number is (571)272-8633. The examiner can normally be reached on M-F 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Aftergut/  
Primary Examiner, Art Unit 1791

/Michael A Tolin/  
Examiner, Art Unit 1791